Work Orde		0785		*110	785*						Page 1
Revision ID: Item Name:	D3502-1 Support 1/07/14 1/07/14	Start Qty: 8.00 Reg'd Qty: 8.00	*8* *8*	Accept	*N900 Cust Item Customer:	ID:	100)* s	etup Star	1.71	S1* S2*
Reference:		· · · · · · · · · · · · · · · · · · ·		d			_	R	tun Sta	rt *NI	D1*
	Process Pla	n: <u>И</u> LJ	Date: 14-01-0			ate:			Sto	, *V	R2*
Sequence ID/ Work Center ID		Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revi	ision Nbr									
D3502	Rev	В									
100 *100* Bandsaw Jeaspa Bandsaw		BAND SAW Memo Cut blank 3	.475 " long1 BLANK M	0.00 0.00 AKES 2 PARTS				4_	ø		St 14-01-24
¹¹⁰ *11∩*		. HAAS CNC VERTICAL	. MACHINING #1	. 0.00				8	8	_	1814-01-21
HAAS 1 HAAS CNC vertical r	machine #1	Memo 1- Mill as pe per dwg D35	er Folio FA649 Rev: 🛕	0.00 & Dwg D3502 Rev:	2-Deburr						
120 *1 20*		QC2- Inspect parts off m	achine FAI/FAIB	0.00				8	w		St. 4-01-21

0.00

Memo

Quality Control

DQA:			Date: _			WORK OPDER NON	cc	NEOI	DRAABICE / LIDDATE				DART
QA Closed:			Date:			WORK ORDER NON-	-CC	JNFOI	RIVIANCE / UPDATE	w	ork Order up	date only	AEROSPACE
		,				DISPOSITION			AGAI	NST DE	PARTMENT	PROCESS	-
Work Orde	er: -		***			Dawark			Skid-tube Crosst	ا موس	1	Water Jet	Engineering
Part N	lo					Rework Scrap			Machining Small	ļ	Pro	d. Eng. Coor.	Quality
1 41 ()	•0.					Use-as-is			noforming Finish		-1	e/Packaging	Other
NCR I	۱o. ِ					Suspected Unapproved			Large Fab Compo]	Supplier	
Root					Desci	ription of work order update		nitial	Action		Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Design													
Doc/Data													
Equip/Tooling	_						Ì						
Handling/Pre													
Material													
Operator													
Offset/Setup	_												
Process	Н												
Supplier	H						1		1 .				
Training	Н												
Transport Unapproved	H								i				
Onapproved				<u> </u>	<u> </u>		FΔI	III T CA	TEGORY				
Landi	ng (Gear	=			General			1200111			-	
		Bending				Bend] Folio/f	Program		Outside Dim	ensions [Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain	0		Over/Under		Set-up
		Cracks				Broken/Damage/Defect	\vdash	Hardwa	are		Part Incorre	ci 📙	Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Unqualified		Part Lost/Mi	ssing	Weld
		Cuffs				Contamination		Instruc	tions Incomplete/Unclear		Part Moved		Wrong Stock Pulled
		Crushing				Countersink	Г	Misalig	gned/off center		Positioned V	Vrong	
		Heat Trea				Cut Too Short		Mislab	eled		Power Loss/	Surge	Other
1		Inspectio	n Strip in	Tube		Drawing		Misrea	d				
		Marks/Cl	natter			Drill Holes		Off-set					
		Turning S	equence			Finish		Out of	Calibration				
		Wave/Tw	ist in Tub	oe		Fit/Function		Out of	Sequence				

Work Orde		0785		*11(785*					Page 2
Item ID: Revision ID: Item Name:	D3502-1 Support			Accept	*N900	<u> </u>)* s	Setup Start Stop	*N: *N	S1*
Start Date: Required Date: Reference:	1/07/14 : 1/07/14	Start Qty: 8.00 Req'd Qty: 8.00	*8* *8*		Cust Item Customer					• • •
Approvals:	Process Pla	n:	Date:	Tooling:]	Date:	F	Run Start	*N	R1*
	QC:		Date:	SPC (Y/N):	1	Date:		Stop	*N	R2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool # Plan / Code	Accept Qty		Reject Number	Insp. Stamp
130		QC8- Inspect parts - sec	ond check	0.00		DAS				
1 30 QC Quality Control		Мето		0.00		DK/ 08 14-01-2(8	<i>b</i>		
140				0.00			ر سزے			DAS /36 9-89
140 Small Fab		Small Fab		0.00	DAS		8X		/	14/01/02
Small Fab		Memo Mark hole p	oosition using DT9430D		27					1 /
905	>				14/1/27		8			
150		Chemical Conversion Co	oat per QSI005 4.1	0.00	•					
150 HandFinish		Memo		0.00			8	<u> 76</u>	141	23

Memo

Hand Finishing

DQA:			Date:		•								`	
						WORK ORDER NON-	-CC	ONFO	RMANCE / UPI				_	AEROSPACE
QA Closed:			Date:							W	ork Order up	date only		
Work Orde	ır.					DISPOSITION				AGAINST DE	PARTMENT	PROCESS		
Work Orde	•					Rework			Skid-tube	Crosstube	1	Water Jet	\neg	Engineering
Part N	lo.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.		Quality
	•					Use-as-is		•	noforming	Finishing	4	e/Packaging		Other
NCR N	lo.					Suspected Unapproved			Large Fab	Composite		Supplier		
Root					Desc	ription of work order update	l	nitial	Actio		Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descrip	otion	Date	Verification		QC Inspector
Design	_													
Doc/Data	4] .											
Equip/Tooling	_		'			•								
Handling/Pre						26								
Material			1											
Operator														
Offset/Setup														
Process														
Supplier	_													
Training Transport														
Unapproved			ļ				Ì							
		l	· !	.l	.		FA	ULT CA	TEGORY					
Landi	ng (Gear				General								
		Bending				Bend		Folio/I	Program		Outside Dim	ensions	P	ressure/Forced
		Centre N	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	s	et-up
ļ		Cracks				Broken/Damage/Defect		Hardwa	are		Part Incorred	ાં [T	emperature/Cure
		Crimp/Ki	nk/Ripple	e/Wave		Burrs		Inspect	ion Incomplete/Unq	ualified	Part Lost/Mi	ssing	v	Veld
		Cuffs				Contamination	Ŀ	Instruc	tions Incomplete/Un	clear	Part Moved		v	Vrong Stock Pulled
		Crushing				Countersink		Misali	gned/off center		Positioned V	Vrong		
		Heat Trea	at			Cut Too Short		Mislab	eled		Power Loss/	Surge		Other
		Inspectio	-	Tube		Drawing		Misrea						
	_	Marks/Cl			<u> </u>	Drill Holes	L	Off-set						
	L	4	Sequence			Finish	L	-	Calibration					
		Wave/Tw	vist in Tul	be		Fit/Function	<u> </u>	Out of	Sequence					

Work Orde		0785		*110	785*						Page 3
Item ID: Revision ID: Item Name: Start Date:	D3502-1 Support 1/07/14	S44 O4 9 00	+ 0+	Accept	*N9000		N *	Setup	Start Stop	*N:	31* 32*
Required Date: Reference:		Start Qty: 8.00 Req'd Qty: 8.00	*8* *8*		Cust Item ID Customer:) :					
Approvals:	Process Pla	nn:	Date:	Tooling: _ SPC (Y/N):	Dat		-	Run	Start Stop	*NF	
Sequence ID/ Work Center II 160 *1 AO* Powdercoat Powder Coating		Operation Description White Gloss(Ref:4.3.5.1) Memo	804. 24K	Set Up/ Run Hours 0.00 0.00 OWEN TEMPERATURE:	Tool ID	Tool # Plan Code		ot Re Qt	y N		Insp. Stampas 34 969
170 *170* QC Quality Control		QC3- Inspect Part Finish Memo		0.00 DAS 0.00 P113	<i>'</i>		_8_				
180 *1 2 1 * Packaging		Identify as per dwg & Sto	ock Location: <u>LG</u>	0.00			_8	/ -	4s 8/	14-01-	-30

Packaging

DQA: Date:				
	WORK ORDER NON-CO	ONFORMANCE / UPDATE	_	AEROSPACE
QA Closed: Date:			Work Order update only	
Work Order:	DISPOSITION	AGAINST	DEPARTMENT/PROCESS	
	Rework	Skid-tube Crosstube	Water Jet	Engineering
Part No.	Scrap	Machining Small Fab	Prod. Eng. Coor.	Quality
	Use-as-is	Thermoforming Finishing	Rec/Store/Packaging	Other
NCR No.	Suspected Unapproved	Large Fab Composite	Supplier	
Root De	escription of work order update	Initial Action	Sign &	
Cause Date Step Qty	·	hief Eng Description	Date Verification	QC Inspector
Design		•		
Doc/Data Doc/Data				
Equip/Tooling		1		
Handling/Pre				
Material '	·			
Operator				
Offset/Setup				
Process				
Supplier				
Training				
Transport				
Unapproved			<u></u>	
		ULT CATEGORY		
Landing Gear	General	7 /-		¬
Bending	Bend	Folio/Program	Outside Dimensions	Pressure/Forced
Centre Not Concentric	BOM/Route	Grain	Over/Under tolerance	Set-up
Cracks	Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure
Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld
Cuffs	Contamination Countersink	Instructions Incomplete/Unclear Misaligned/off center		Wrong Stock Pulled
Crushing Heat Treat	Cut Too Short	Mislabeled	Positioned Wrong Power Loss/Surge	Other
Inspection Strip in Tube	Drawing	Misread	ower Loss/Surge	Totalei
Marks/Chatter	Drill Holes	Off-set		
I H '				
Turning Sequence	Finish	Out of Calibration		

Work Order ID 110785 *110785* Page 4 January-07-14 3:03:25 PM Item ID: D3502-1 Accept *N900040100* Setup Start **Revision ID:** Stop Support **Item Name: Start Date:** 1/07/14 **Start Qty:** 8.00 *****8* **Cust Item ID:** Required Date: 1/07/14 **Req'd Oty:** 8.00 *****2* **Customer:** Reference: Run Start **Approvals:** Process Plan: Date: **Tooling:** Date: Stop QC: Date:____ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool# Plan Reject Reject Insp. Accept Work Center ID Description Qty Qty Number Stamp **Run Hours** Code 190 QC21- Final Inspection - Work Order Release 0.00 *100* QC 0.00 Memo

Quality Control

DQA:			Date:										$ \mathcal{Q} $	AART
•						WORK ORDER NON-	-CC	ONFO	RMANCE / UPDA			_		AEROSPACE
QA Closed:			Date:							Wo	ork Order up	date only		
Work Orde	er:					DISPOSITION			Д	AGAINST DE	PARTMENT	PROCESS		
	•				_	Rework			Skid-tube Cr	rosstube		Water Jet	٦ Eı	ngineering
Part N	lo.					Scrap			—	mall Fab	Proc	d. Eng. Coor.	┤ ̄	Quality
	•				_	Use-as-is			~ 	Finishing	1	e/Packaging		Other
NCR N	lo.					Suspected Unapproved			Large Fab Co	mposite		Supplier		
Root	-				Desci	ription of work order update		nitial	Action		Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descriptio	n	Date	Verification		QC Inspector
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Doc/Data														
Equip/Tooling														
Handling/Pre														
Material														
Operator								÷	-					
Offset/Setup														
Process														
Supplier			1				ļ							
Training														
Transport							l							
Unapproved					<u> </u>		L_						<u> </u>	
							FAI	ULT CA	TEGORY					
Landi		1			_	General		1	_		1		_	
		Bending	_		<u> </u>	Bend	<u> </u>	1	Program	<u> </u>	Outside Dim	 		ssure/Forced
		Centre No	ot Concer	ntric	<u> </u>	BOM/Route	_	Grain		_	Over/Under	 		-up
		Cracks				Broken/Damage/Defect	<u> </u>	Hardwa			Part Incorred	H	_	nperature/Cure
		Crimp/Kir	nk/Ripple	/Wave	-	Burrs		1	ion Incomplete/Unqual	<u> </u>	Part Lost/Mi	ssing	We	
1	_	Cuffs			<u> </u>	Contamination	<u> </u>	4	tions Incomplete/Uncle	ar	Part Moved	_ L	Wro	ong Stock Pulled
	<u> </u>	Crushing	_		\vdash	Countersink	<u> </u>	1	gned/off center	<u> </u>	Positioned V	_	–	
	<u> </u>	Heat Trea			<u> </u>	Cut Too Short	<u> </u>	Mislabe		L	Power Loss/	Surge	Oth	ier
	<u> </u>	Inspection	•	Tube	<u> </u>	Drawing	<u></u>	Misrea						
	<u> </u>	Marks/Ch			<u> </u>	Drill Holes	\vdash	Off-set						
]	$ldsymbol{ldsymbol{eta}}$	Turning S	•		_	Finish		4	Calibration					
		Wave/Tw	ist in Tub	oe		Fit/Function	1	Out of	Sequence					

January-07-14 3:03:25 PM

Work Order ID:

110785

Parent Item:

D3502-1

Parent Item Name:

Support

Start Date: 1/07/14

Required Date: 1/07/14

Start Qty: 8.00

Required Qty: 8.00

Comments:

IPP Rev:A New Issue 06-07-06 JLM

IPP Rev:B Add tooling hole 07-03-28

For rev C. added DT9430 08 11 03

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.000X04.000 6061-T6 Bar 1.00 x 4.00		Purchased	No			. 100	f	63.0000	0.1445 	1.2168424 00`	SI	14-01-	-2/
				Location		Loc Qty	<u>Lo</u>	c Code					
				MAT003		63							
				124	681	24							
				125	272	3			1.2	00			
				M1:	26160	10							
				M1:	26351	2							
				M1:	27797	24							

DQA:			Date:										7	
						WORK ORDER NON-	-CC	ONFO	RMANCE / UI	PDATE		_		AEROSPACE
QA Closed:			Date:							\	Vork Order u	odate only	丄	
Work Orde	er:					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS		
					_	Rework	1 .		Skid-tube	Crosstube		Water Jet	7 ,	Engineering
Part N	lo.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	7	Quality
						Use-as-is		Therr	noforming	Finishing	Rec/Sto	re/Packaging	\neg	Other
NCR N	۱o.					Suspected Unapproved]		Large Fab	Composite		Supplier		
Root	_				Dosc	ription of work order update		nitial	Acti	ion	Sign 9			
Cause		Date	Step	Qty	Desci	or non-conformance	ı	iiilliai iief Eng		iption	Sign & Date	 Verification	,	QC Inspector
Design		Date	Step	Qty		or non-comormance		ilei Liig	Desci	iption	Date	vermeation		QC IIISPECTOI
Doc/Data														
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Offset/Setup														
Process													Ì	
Supplier				:									i	
Training														
Transport														
Unapproved														
							FA	ULT CA	TEGORY					
Landi		ı			_	General	_			_	_	-		
		Bending			<u> </u>	Bend		4 .	Program	L	Outside Dim	- F	Pr	essure/Forced
		Centre No	ot Concer	ntric	<u> </u>	BOM/Route		Grain		<u> </u>	Over/Under			et-up
		Cracks				Broken/Damage/Defect	<u> </u>	Hardwa			Part Incorre	.		mperature/Cure
		Crimp/Kir	nk/Ripple	/Wave	<u> </u>	Burrs	<u> </u>	1 '	ion Incomplete/Un	· -	Part Lost/M	- H	_	eld
	\vdash	Cuffs			<u> </u>	Contamination		4	tions Incomplete/U	Inclear	Part Moved	L	\w _'	rong Stock Pulled
	<u> </u>	Crushing			<u> </u>	Countersink	<u> </u>	1 7	gned/off center	L	Positioned V	· ·		
	<u> </u>	Heat Trea			<u> </u>	Cut Too Short	\vdash	Mislabe		L	Power Loss/	Surge [Ot	her
	\vdash	Inspection	•	lube	-	Drawing	\vdash	Misrea						
	<u> </u>	Marks/Ch			<u> </u>	Drill Holes		Off-set						
	<u> </u>	Turning S			<u> </u>	Finish	_	4	Calibration					
	1	Wave/Tw	ist in Tub	e	j	Fit/Function	1	Out of	Sequence					

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

DART AEROSPACE LTD	Work Order:	110785
Description: Support	Part Number:	D3502-1
Inspection Dwg: D3502 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

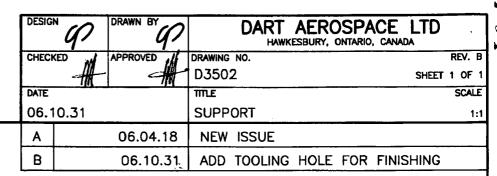
X	First Article		Prototype
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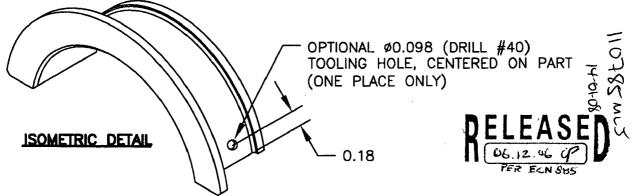
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
R1.590	+/-0.010	1.588			SLO3	Mic
R1.177	+0.005/-0.000	1.179			١,	_
0.130	+/-0.010	.127			SL08	Ven
0.080	+/-0.010	.080			Deep thi	out mic
0.928	+/-0.010	.923			5108	Vem
0.100	+/-0.010	.100)	·
0.100	+/-0.010	.093				
1.39	+/-0.030	1.391				
	,					

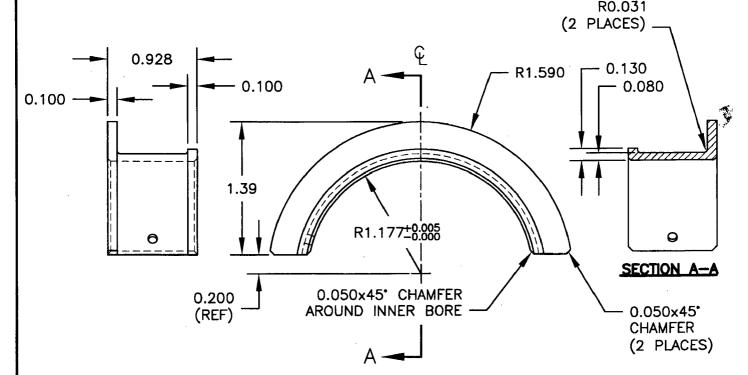
OII			/ 204 -	04-		
Measured by:	SF	Audited by:	08	Prototype Approval:	N/A	
Date:	14-01-21	Date: /4/-0	7 3,00	Date:	N/A	

Rev	Date	Change	Revised by	Approved
Α	06.09.01	New Issue	KJ/JLM	
В	07.03.29	Dwg Rev. updated	KJ/JLM O	









D3502-1 SUPPORT

- 1) MATERIAL: 6061-T6 ROUND BAR (REF DART SPEC. M6061T6R)
- 2) BREAK ALL UNMARKED SHARP EDGES 0.010 TO 0.020
- 3) PART IS SYMMETRIC ABOUT CENTERLINE
- 4) TOLERANCES ARE PER DART QSI 018 (REF. X.XXX = ± 0.010 , X.XX = ± 0.030) UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3

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